

CLAIMS

What is claimed is:

- 5 1. A system for adjusting the position of a head relative to a track on a rotatable storage medium, comprising:
 - a rotatable medium including at least one surface having a servo pattern contained thereon, the servo pattern containing a plurality of concentric quadrants and a plurality of servo wedges;
 - 10 a positioning mechanism adapted to determine any misplacement of a portion of the servo pattern in one of the servo wedges, and the quadrant containing that portion; and
 - a write mechanism adapted to write information regarding the misplacement and quadrant to the servo wedge containing that portion.
- 15 2. A system according to claim 1, wherein:
 - the rotatable medium includes a servo pattern containing a plurality of servo bursts, and the portion of the servo pattern includes at least one burst.
- 20 3. A system according to claim 2, wherein:
 - the rotatable medium includes a servo pattern containing a plurality of servo bursts, and the portion of the servo pattern includes a burst boundary.
- 25 4. A system according to claim 2, wherein:
 - the rotatable medium includes a servo pattern containing a plurality of servo bursts, and the portion of the servo pattern includes a pair of servo bursts.
- 30 5. A system according to claim 1, further comprising:
 - a head containing the write element.

6. A system according to claim 5, wherein:
the head further contains a read element.

7. A system according to claim 5, wherein:

5 the rotatable medium includes a servo pattern containing a plurality of servo boundaries, and each boundary is adapted to be used for positioning the head relative to the rotatable medium.

8. A system for determining servo pattern misplacements, comprising:

10 a rotatable medium capable of storing information written to the rotatable medium;

a read element capable of reading information from the rotatable medium;

15 a write element capable of writing information to the rotatable medium; and

a control mechanism in communication with the read element and write element, the control mechanism adapted to:

determine any misplacement of a portion of a servo pattern on a rotating medium;

20 identify a quadrant on the rotating medium containing the portion; and

store information about the misplacement and the quadrant to be used in any of a read operation and write operation that determines position using that portion of the positioning pattern, such that the misplacement information is only used for that quadrant.

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9. A system according to claim 8, further comprising:

a servo controller adapted to determine the misplacement.

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10. A system according to claim 8, wherein:

the write element is further adapted to write information about the misplacement and quadrant to the quadrant on the rotating medium containing the positioning pattern.

- 5 11. A system for reducing written-in runout in a servo pattern on a magnetic hard disk, comprising:
- means for determining the misplacement of a servo burst pair on a rotating hard disk;
- means for identifying the quadrant containing the servo burst pair,
- 10 the rotating hard disk having a plurality of quadrants extending radially across a surface of the disk; and
- means for storing information about the misplacement of the burst pair and the quadrant to be used in any of a read operation and write operation that determines position using that burst pair, such that the
- 15 misplacement is only used for that quadrant.
12. A system for removing servo burst misplacement, comprising:
- a rotatable medium including at least one surface having a servo pattern contained thereon, the servo pattern containing a plurality of
- 20 concentric quadrants and a plurality of tracks;
- a positioning mechanism adapted to determine any misplacement of a portion of the servo pattern relative to one of the tracks, and the quadrant containing that portion; and
- a write mechanism adapted to write information regarding the
- 25 misplacement and quadrant to the track containing that portion.